Notice of Allowability	Application No. 10/825,586	Applicant(s) OGURA, MASAKI	
	Examiner Joseph P. Martinez	Art Unit 2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *11-9-05*.

2. ☒ The allowed claim(s) is/are *2-15*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

Allowable Subject Matter

Claims 2-15 are allowed.

The following is an examiner's statement of reasons for allowance: the prior art taken alone or in combination fails to anticipate or fairly suggest the limitations of the claims, in such a manner that a rejection under 35 USC 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed features as presented in independent claims 2, 3, 5, 9, 11 and 15.

Specifically regarding claim 2, Wilkerson, Jr. et al. (6539038) teaches the state of the art of signal converters.

But, Wilkerson, Jr. et al. fails to explicitly teach a combination of all the claimed features, including the first feedback system comprises a first mixer for multiplying the pilot signal and the monitor signal; a first low pass filter for providing the frequency deviation signal based on a low frequency component obtained from an output of the first mixer; and a first differential amplifier for providing the amplitude control signal in accordance with a difference between an output of the first low pass filter and a first reference signal, as claimed.

Specifically regarding claim 3, Wilkerson, Jr. et al. (6539038) teaches the state of the art of signal converters.

But, Wilkerson, Jr. et al. fails to explicitly teach a combination of all the claimed features, including the second feedback system comprises a first oscillator for generating a multiplying frequency corresponding multiplication of the frequency of the pilot signal; a second mixer for multiplying an output of the first oscillator and the monitor signal; a second low pass filter for providing the multiplying frequency deviation signal based on a low frequency component obtained from an output of the second mixer; and a second differential amplifier for providing the bias control signal in accordance with a difference between an output of the second low pass filter and a second reference signal, as claimed.

Specifically regarding claim 5, Wilkerson, Jr. et al. (6539038) teaches the state of the art of signal converters.

But, Wilkerson, Jr. et al. fails to explicitly teach a combination of all the claimed features, including the second feedback system comprises a second oscillator for generating the frequency of the pilot signal; a band pass filter for providing a harmonic wave contained in the pilot signal; a third mixer for multiplying the harmonic wave and the monitor signal; a third low pass filter for providing a multiplying frequency deviation signal based on a low frequency component obtained from an output of the third mixer; and a third differential amplifier for providing the bias control signal in accordance with a difference between an output of the third low pass filter and a third reference signal, as claimed.

Specifically regarding claim 9, Wilkerson, Jr. et al. (6539038) teaches the state of the art of signal converters.

But, Wilkerson, Jr. et al. fails to explicitly teach a combination of all the claimed features, including generating a twofold frequency of the frequency of the pilot signal, as claimed.

Specifically regarding claim 11, Wilkerson, Jr. et al. (6539038) teaches the state of the art of signal converters.

But, Wilkerson, Jr. et al. fails to explicitly teach a combination of all the claimed features, including the second feedback system comprises a second oscillator for generating the frequency of the pilot signal.

Specifically regarding claim 15, Wilkerson, Jr. et al. (6539038) teaches the state of the art of signal converters.

But, Wilkerson, Jr. et al. fails to explicitly teach a combination of all the claimed features, including a first oscillator for generating a signal for interior reference of a twofold frequency of the frequency of the pilot signal; and a second oscillator for generating the frequency of the pilot signal, as claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph P. Martinez whose telephone number is 571-272-2335. The examiner can normally be reached on M-F 7:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 571-272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPM
11-17-05

Hung Xuan Dang
Primary Examiner